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Differential carrier with an increased strength

Abstract

The invention relates to a differential carrier 11 for a differential drive, which differential carrier 11 has to be supported so as to be rotatably drivable around its longitudinal axis A, containing sideshaft gears 18, 19 which are supported in the differential carrier so as to be coaxially rotatable around the longitudinal axis A, containing differential gears 20, 21 which are supported in the differential carrier 11 on axes of rotation R positioned radially relative to the longitudinal axis A and whose teeth engage those of the sideshaft gears 18, 19, as well as containing a multi-plate coupling 41 which is arranged in the differential carrier 11 so as to extend coaxially relative to the longitudinal axis A and which is arranged so as to be effective between a first one of the sideshaft gears 19 on the one hand and the differential carrier 11 or the second one of the sideshaft gears 18 on the other hand. The differential carrier 11 comprises a flange 16 to which a ring gear can be bolted, wherein the differential carrier 11 is formed of a dish-shaped part 14 comprising a base 22 and an integrally formed-on flange 16 and of a cover 15 which is axially fixed by an annular securing element 17.

The multi-plate coupling 41 and the cover 15 - with reference to a plane extending through the axes of rotation R of the differential gears 20, 21 - are positioned in the differential carrier 11 on the side located opposite the flange 16 and the

base 22.

Figure 1